A child diagnosed with rigid spine syndrome complicated by ventilatory disorders: a nursing case report.
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Abstract
Rigid spine syndrome is a rare myopathy in children and has a poor prognosis because of its lack of treatment and eventual ventilatory failure. We report the case of a 10-year-old child with RSS and ventilatory disorders. We provided care to the child using bilevel positive airway pressure (BiPAP) non-invasive mechanical ventilation and continuous monitoring of transcutaneous carbon dioxide pressure. A 10-year-old Han Chinese girl presented (6 April 6 2016) to the Shanghai Children's Medical Center with ventilatory disorders, including hypoxia and hypercapnia. Transcutaneous oxygen saturation with mask oxygen inspiration was 90%. BiPAP non-invasive ventilator-assisted ventilation was continuously used. Through continuous non-invasive ventilation and carbon dioxide monitoring, the symptoms of dyspnea in this child were effectively controlled and improved. She was discharged on April 19 with instructions to continue using BiPAP at home and transcutaneous oxygen saturation was maintained at 94% to 98%. This case highlights that nursing of patients with rigid spine syndrome and ventilatory disorders should focus on evaluating the effect of non-invasive mechanical ventilation, prevention of complications, and continuous nursing after discharge. Additionally, continuous monitoring of transcutaneous carbon dioxide pressure is feasible for evaluating the effect of BiPAP.

KEYWORDS: Rigid spine syndrome; bilevel positive airway pressure; dyspnea; non-invasive ventilation; nursing; partial pressure monitoring; transcutaneous carbon dioxide

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